

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER 87-042

NPDES PERMIT NO. CA0037427

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

SANITARY DISTRICT NO. 5 OF MARIN COUNTY  
PARADISE COVE TREATMENT PLANT  
MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (the Board), finds that:

1. The Sanitary District No. 5 of Marin County (hereinafter the discharger) applied for waste discharge requirements and a reissuance of a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES). The discharger's application, dated March 5, 1987, was for the Paradise Cove Treatment Plant.
2. The treatment plant treats sewage from 12 homes, with an average flowrate of 1,500 gallons in 1985. The plant's rated capacity is 25,000 GPD, but the discharger has determined that the effective capacity is 11,000 GPD. The plant discharges secondary effluent through a 4-inch diameter outfall which extends about 500 feet from shore.
3. The Paradise Cove Treatment plant uses an extended aeration process. The treatment units consist of two wetwells, a communitor, aeration basin and clarifier, and chlorination facilities. The effluent is not dechlorinated, as required by its NPDES permit. As such, the plant is in violation of its current NPDES permit, specifically the effluent limitations for chlorine residual.
4. The Treatment Plant is located off of Paradise Drive about two miles north of the town of Tiburon, in Marin County (see Attachment B).
5. Most other homes in the vicinity of the Paradise Cove Plant have individual septic systems. There have been proposals to sewer the entire eastern Tiburon peninsula at the time when several large undeveloped parcels are developed. The area would be included in Sanitary District No. 5, and the Paradise Cove plant would be expanded at that time. Another small wastewater treatment plant, run by the Sewerage Agency of Southern Marin, is located about 1/2 mile northwest of the subdivision and serves a small number of residences at the Seafirth Estates subdivision. When

development occurs, the Seafirth subdivision would be connected to the consolidated sewerage system, and the Seafirth plant would close.

6. The proposed expansion of the Paradise Cove Plant was detailed in a draft Environmental Impact Report dated June 30, 1984. At maximum buildout, the plant would serve a population of 694 people, with an average daily flow of 59,400 gallons. The report noted that the plant expansion would include the addition of a new activated sludge package plant unit, a new sludge holding tank, a new pump pad, and a dechlorination unit. Various new controls, and sludge drying beds, and flood control improvements would also be necessary.
7. Many obstacles stand in the way of developing the remaining parcels of land. These parcels would need to be annexed to Sanitary District No.5, and the existing homes currently using septic systems would need to be tied into the collection system. The expansion of the Paradise Cove Treatment Plant is thus many years away, and a firm timetable cannot be established.
8. The discharger is presently governed by waste discharge requirements in Order No. 82-20, which allow discharge into San Francisco Bay.
9. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for San Francisco Bay.
10. The beneficial uses of San Francisco Bay in the vicinity of the outfall are:
  - a. Water contact recreation
  - b. Non contact water recreation
  - c. Commercial and sport fishing
  - d. Wildlife habitat
  - e. Preservation of habitat for rare and endangered species
  - f. Estuarine habitat
  - g. Fish migration and spawning
  - h. Shellfish harvesting
  - i. Navigation
  - j. Industrial process and service supply
11. The Basin Plan prohibits the discharge of any wastewater which has particular characteristics of concern to beneficial uses at any point where wastewater does not receive an initial dilution of at least 10:1.
12. This Order serves as an NPDES permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with

(CEQA) pursuant to Section 13389 of the California Water Code.

13. The discharger and interested persons have been notified of the Board's intent to revise requirements for the existing discharge and have been provided with the opportunity to submit their written comments.
14. The Board, in a properly-noticed public hearing, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder and to the provisions of the Federal Water Pollution Control Act, as amended, and regulations and guidelines adopted thereunder, that the discharger shall comply with the following:

A. Prohibitions

1. The discharger is prohibited from bypassing or overflowing wastewater to waters of the State, either at the plant or from the collection system.
2. The discharger is prohibited from discharging wastewater at any point at which the wastewater does not receive an initial dilution of at least 10:1 (receiving water to wastewater flow).
3. The average dry weather flow shall not exceed 11,000 gallons per day. Averages shall be determined over three consecutive dry weather months each year.

B. Effluent Limitations

1. The discharge of an effluent containing constituents in excess of the following limits is prohibited:

	<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>	<u>Instantaneous Maximum</u>
a.	BOD	mg/l	30	45	60	
b.	Suspended Solids	mg/l	30	45	60	
c.	Oil & Grease	mg/l	10	-	20	
d.	Settleable Solids	ml/l-hr	0.1	-	-	0.2

e. Chlorine                      mg/l                      -                      -                      -                      0.0  
Residual

f. Total Coliform Organisms

The waste as discharged, or at some place in the treatment process, shall meet or exceed the following limits of quality. The total coliform bacteria for a median of five consecutive effluent samples shall not exceed 240 per 100 milliliters. Any single sample shall not exceed a most probable number (MPN) of 10,000 total coliform when verified by a repeat sample taken within 48 hours.

g. Toxicity

The survival of an acceptable test organism in 96-hour bioassays of the effluent shall achieve a 90 percentile value of not less than 50 percent survival.

h. pH

The pH of the discharge shall not exceed 9.0 nor be less than 6.0.

2. The arithmetic mean of the biochemical oxygen demand (5 day, 20°C) and suspended solids values, by weight, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period (85% removal).

#### C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

- a. Floating, suspended, or deposited macroscopic particulate matter or foam;
- b. Bottom deposits or aquatic growths;
- c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
- d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
- e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of the

these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
  - a. Dissolved oxygen: 5.0 mg/l minimum. The median of any three consecutive samples shall not be less than 80% saturation. When natural factors cause lesser concentrations than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
  - b. Dissolved sulfide: 0.1 mg/l maximum.
  - c. pH: Variation from natural ambient pH by more than 0.2 pH units.
  - d. Un-ionized Ammonia as N: 0.025 mg/l annual median and 0.4 mg/l maximum.
3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 82-20. Order No. 82-20 is hereby rescinded.
2. Where concentration limitations in mg/l are contained in this permit, the following mass emission limitations shall also apply as follows:

Mass emission limit in lbs/day = Concentration limit in mg/l x 8.34 x Actual flow in mgd averaged over the time interval to which the limit applies.
3. The discharger shall comply with all sections of this order immediately except as stipulated in provision 4

4. The discharger shall comply with the effluent limitations for chlorine residual and toxicity (items B.1.e and B.1.g) according to the following schedule:

<u>Task</u>	<u>Completion Date</u>
a. Submit design for improvements to provide dechlorination of effluent, subject to Executive Officer's approval	November 1, 1987
b. Complete construction of plant improvements	March 1, 1988
c. Attain full compliance with effluent limitations	April 1, 1988

The discharger shall submit to the Board, on or before each completion date, a report detailing compliance or non-compliance with the specified task. If non-compliance is being reported, the report should state the reasons for non-compliance and provide an estimate of when the discharger will return to compliance. The discharger shall notify the Board in writing when he or she has returned to compliance.

5. The discharger shall employ a plant operator with at least a Grade II certification to supervise operation of the sewage treatment plant, or demonstrate to the Executive Officer's satisfaction that an equivalent level of supervision is being maintained.
6. The discharger shall comply with the Self-Monitoring Program as ordered by the Executive Officer.
7. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated December, 1986.
8. This order expires on May 20, 1992. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of this expiration date as application for issuance of new waste discharge requirements.
9. This order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act or amendments thereto, and shall become effective 10 days after the date of its adoption, provided that the Regional Administrator of the Environmental Protection Agency has no objection. If the Regional Administrator

objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on May 20, 1987.

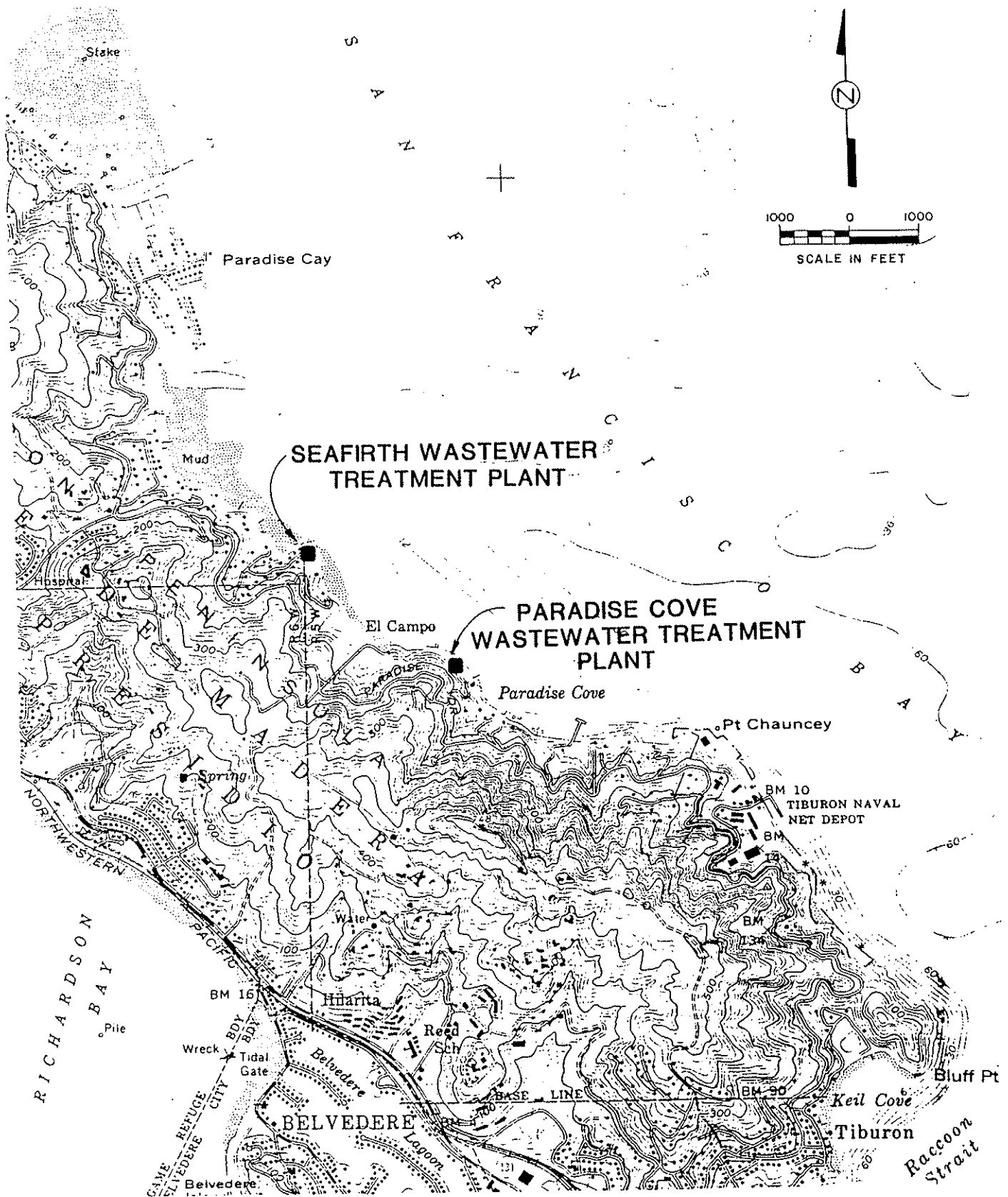


ROGER B. JAMES  
Executive Officer

Attachments:

Location Map  
Standard Provisions (Dec. 1986)  
Self-Monitoring Program

# LOCATION MAP - PARADISE COVE TREATMENT PLANT



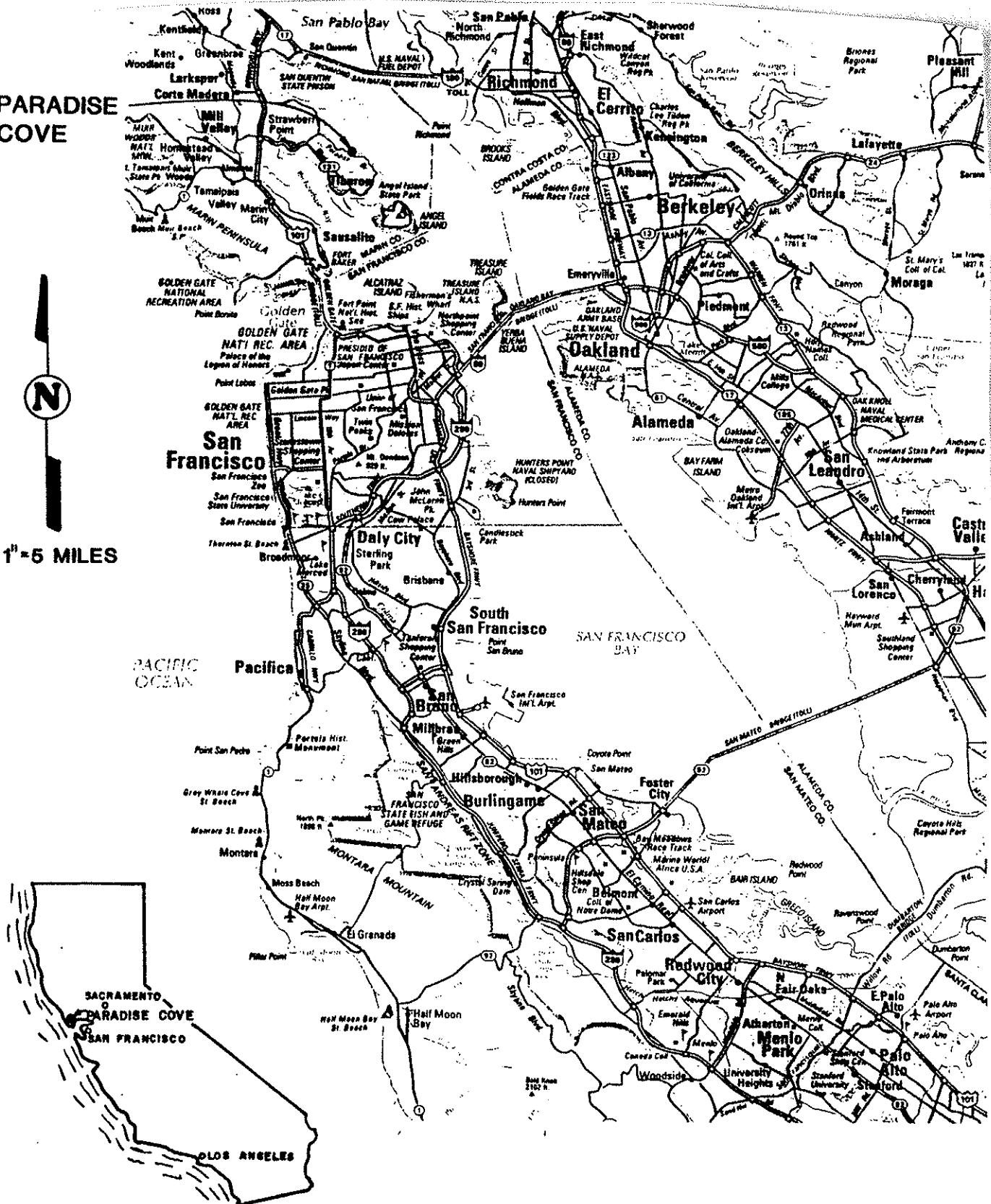


# LOCATION MAP - PARADISE COVE TREATMENT PLANT

PARADISE COVE



1" = 5 MILES



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

FINAL  
SELF-MONITORING PROGRAM  
FOR

SANITARY DISTRICT NO. 5 OF MARIN COUNTY  
PARADISE COVE TREATMENT PLANT  
TIBURON, MARIN COUNTY

CONSISTS OF

PART A

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

PART A

I. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as a self-monitoring program, are:

1. To document compliance with waste discharge requirements and prohibitions established by this Regional Board.
2. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge.

II. DESCRIPTION OF SAMPLING AND OBSERVATION STATIONS

A-001 At any point in the treatment facilities headworks at which all waste tributary to the system is present and preceding any phase of treatment

E-001 At any point in the outfall from the treatment facilities between the point of discharge and the point at which all waste tributary to that outfall is present

III. SCHEDULE FOR SAMPLING AND OBSERVATIONS

See attached table

IV. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Violations of Requirements

In the event the discharger is unable to comply with the requirements of the waste discharge requirements and prohibitions due to:

- (a) maintenance work, power failures, or breakdown of waste treatment equipment, or
- (b) accidents caused by human error or negligence, or
- (c) other causes such as acts of nature,

The discharger shall notify the Regional Board office by telephone as soon as she or her agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to prevent the problem from recurring.

2. Self-Monitoring Report

Written reports shall be filed with the Regional Board quarterly, and are due on the 15th day following the end of the quarter. The reports shall specifically cover each applicable point in the monitoring program. Any violations shall be clearly identified, and actions taken or planned for correcting violations shall be included. Monitoring reports shall be signed by the District manager or her duly authorized representative.

The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

3. Annual Report


An annual report summarizing the compliance record of the treatment plant shall be submitted to the Board by December 1 of each year. This report shall contain a summary and analysis of the water quality data from the effluent station. The report shall also contain a list of all violations of requirements in the previous year.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No.

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and reivisions will be ordered by the Executive Officer.

  
Roger B. James  
Executive Officer

Effective Date MAY 22, 1987